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BEFORE THE BOARD OF PATENT APPEALS AND INTERFERENCES

Application Number: 09/891,913
Filing Date: June 26, 2001
Appellant(s): SINGHAL, TARA CHAND

Tara Chand Singhal
Appellant

EXAMINER'S ANSWER

This is in response to the appeal brief filed 1 April 2010 appealing from the Office action mailed 24 November 2009.

(1) Real Party in Interest

The examiner has no comment on the statement, or lack of statement, identifying by name the real party in interest in the brief.

(2) Related Appeals and Interferences

The examiner is not aware of any related appeals, interferences, or judicial proceedings which will directly affect or be directly affected by or have a bearing on the Board's decision in the pending appeal.

(3) Status of Claims

The following is a list of claims that are rejected and pending in the application:

Claims 106-124 were rejected in the Final Office Action dated 24 November 2009 and are pending.

(4) Status of Amendments After Final

The examiner has no comment on the appellant's statement of the status of amendments after final rejection contained in the brief.

(5) Summary of Claimed Subject Matter

The examiner has no comment on the summary of claimed subject matter contained in the brief.

(6) Grounds of Rejection to be Reviewed on Appeal

The examiner has no comment on the appellant's statement of the grounds of rejection to be reviewed on appeal. Every ground of rejection set forth in the Office action from which the appeal is taken (as modified by any advisory actions) is being maintained by the examiner except for the grounds of rejection (if any) listed under the

subheading "WITHDRAWN REJECTIONS." New grounds of rejection (if any) are provided under the subheading "NEW GROUNDS OF REJECTION."

(7) Claims Appendix

The examiner has no comment on the copy of the appealed claims contained in the Appendix to the appellant's brief.

(8) Evidence Relied Upon

5770843	Rose et al.	06-1998
6227447	Campisano	05-2001
5557087	Duyck	09-1996
5420926	Low et al.	05-1995
5870722	Albert et al.	02-1999
7254557	Gillin et al.	08-2007

(9) Grounds of Rejection

The following ground(s) of rejection are applicable to the appealed claims:

Claim Rejections - 35 USC § 103

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

   (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

2. The factual inquiries set forth in Graham v. John Deere Co., 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

   1. Determining the scope and contents of the prior art.

2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

3. Claims 106-108 are rejected under 35 U.S.C. 103(a) as being unpatentable over Rose et al. (US 5770843) in view of Campisano (US 6227447), further in view of Duyck (US 5557087) and Low et al. (US 5420926).

Claim 106 –

As per claim 106, Rose disclose *a method of protecting from theft and misuse bankcard data from merchant computer systems and securely selecting any one of a plurality of bankcards of a customer at a merchant point of sale interface for a payment transaction to a merchant* having the limitations of:

- *enabling selecting a debit card transaction requiring entry of a PIN in a merchant point of sale (POS) interface, enabling entering of (i) customer identifier, without customer identity data, by a payment card that encodes the customer identifier and (ii) a bankcard specific identification number (CPIN) in the merchant point of sale (POS) interface; (see at least col. 2, ll. 1-3, 14-22, 24-27; col. 3, ll. 46-55, col. 4, ll. 16-40, of Rose)*
- *interfacing by the adapted prior art gateway with a payment system, and sending to the payment card system the customer identifier and the CPIN; (see at least col. 2, ll. 1-3, 14-22, 24-27; col. 3, ll. 46-55, col. 4, ll. 16-40, of Rose)*
- *having stored customer bankcard data in the payment card system, wherein each bankcard is identified with a separate CPIN, identifying a particular bankcard data of the customer and verifying the customer by the bankcard specific CPIN in the payment card system; (see at least* col. 3, l. 26 through col. 4, l. 61 *of Rose)*

Rose et al. do not explicitly disclose:

- *enabling sending the customer identifier and the CPIN to an adapted prior art merchant gateway, along with the payment transaction data that includes a merchant identifier and a payment amount;*

- *returning to the adapted prior art merchant gateway the bankcard data corresponding to the customer identifier and the CPIN from the payment card system;*
- *assembling by the adapted prior art merchant gateway, a payment transaction record to include the bankcard data from the payment card system and the payment transaction data, and by submitting the payment transaction record to a bankcard authorization network,*
- *wherein the method does not transfer bankcard identity to the merchant computer systems.*

Rose in view of Campisano teach *enabling sending the customer identifier and the CPIN to an adapted prior art merchant gateway, along with the payment transaction data*; *returning to the adapted prior art merchant gateway the bankcard data corresponding to the customer identifier and the CPIN from the payment card system*; *assembling by the adapted prior art merchant gateway, the payment transaction record to include the bankcard data from the payment card system and the payment transaction data, and by submitting a payment transaction record to a bankcard authorization network* (see at least col. 3, l. 26 through col. 4, l. 61 of Rose; *see at least Fig. 1, col. 2, ll. 31-37;* col. 2, l. 66 through col. 3, l. 10 of Campisano). It would have been obvious to one of ordinary skill in the art at the time of the invention to expand the method of Rose to include a verification process and subsequent charging of the credit card as taught by Campisano. One of ordinary skill in the art at the time of the invention would have been motivated to expand the method of Rose in this way since the verification process is similar to that used to verify original credit card numbers and expiration dates and once the number has been verified, the merchant processes the transaction and the credit card is charged, completing the transaction (see at least col. 2, l. 66 through col. 3, l. 10 of Campisano).

Duyck teach *the payment transaction data that includes a merchant identifier and payment amount* (see at least Figs. 2-3 and col. 3, ll. 33-52). It would have been obvious to one of ordinary skill in the art at the time of the invention to expand the method of Rose in view of Campisano to include transaction amount and unique merchant code as taught by Duyck. One of ordinary skill in the art at the time of the invention would have been motivated to expand the method of Rose in view of Campisano in this way since the unique merchant code links the transaction to a particular merchant (see at least col. 3, ll. 33-52 of Duyck).

Low et al. teach *wherein the method does not transfer bankcard identity to the merchant computer systems* (see at least col. 3, ll. 9-11; 18-20, 21-29, 33-37). It would have been obvious to one of ordinary skill in the art at the time of the invention to expand the method of Rose to include bank Bp which knows the customer only by the pseudonym P and transfers funds from account Bp to the stores account Bs as taught by Low et al. One of ordinary skill in the art at the time of the invention would have been motivated to expand the method of Rose in this way since the protocols ensure the anonymity is maintained even if parties other than the purchaser collude with each other to obtain information about the customer (see at least col. 2, ll. 13-17 of Low et al.).

Claim 107 –

Rose in view of Campisano, Duyck and Low et al. teach the method of claim 106 as described above. Rose et al. further explicitly disclose:

- *encoding the customer identifier without customer identity data on the payment card with an algorithm and decoding the customer identifier with the algorithm in the payment card system to get the customer identifier. identifier (see at least* col. 3, l. 26 through col. 4, l. 61 *of Rose)*

The Examiner notes that Rose does not specifically state “algorithm in the payment card."

However, Rose does disclose:

The card bears a machine readable code, which is transmitted to a database at a remote location. The database locates a record associated with the code, which contains one or more account numbers. (see Abstract)

The code contained within the magnetic stripe is actually a set of signals. This set of signals when delivered to the card reader and thence to database management software cause the software to fetch the account numbers and PINs which are associated with the code. (see col. 4, ll. 26-31)

Thus, the code acts as a key to unlock and release the account numbers and the PINs. In principle, the code is no different than a key which unlocks a strongbox which contains the database in a paper format. (see col. 4, ll. 32-36)

Further, the code should not be viewed as or confused with numbers or other alphanumeric characters. The code contained in the magnetic strip is a physical entity which includes physical actions when acted upon by a physical device such as a card reader. (see col. 4, ll. 37-41)

Representing the code as a string of numbers merely presents the code in human-understandable form, which is necessary for a human to read the code because a human cannot directly read the signals on the magnetic stripe. (see col. 4, ll. 42-44)

“Software” mush exist in a form which is readable by a microprocessor, and readable at speeds at which the microprocessor operates. (see col. 4, ll. 56-58)

Even though Rose does not explicitly state "algorithm", Rose teaches a code contained in the magnetic stripe that is transmitted to the remote database management software, causing the software to fetch account numbers and PINs which are associated with the code. One of ordinary skill in the art would have been motivated to include the embedded code, remote database with associated software since the associated code and software fetch account numbers and PINs which are associated with that code embedded in the magnetic stripe of the card.

Claim 108 –

Rose in view of Campisano, Duyck and Low et al. teach the method of claim 106 as described above. Rose et al. further disclose *a method* having the limitations of:

- *delivering the payment card to the customer; (see at least col. 2, ll. 1-3, 14-22, 24-27 of Rose)*

Rose does not explicitly disclose:

- *enabling entering the bankcard data and self-selecting the CPIN for each of the bankcards of the customer in the payment card system.*

Campisano teach *enabling entering the bankcard data and self-selecting the CPIN for each of the bankcards of the customer in the payment card system* (see at least *col. 3, ll. 7-26, 45-66*). It would have been obvious to one of ordinary skill in the art at the time of the invention to expand the payment card system of Rose et al. to include a card member selecting a PIN as taught by Campisano. One of ordinary skill in the art at the time of the invention would have been motivated to expand the payment card system of Rose et al. in this way since allows a customer to select multiple PINs, each of which would correspond to a different credit card and provide the PIN corresponding to the card the customer wishes to charge the purchase on (see at least col. 4, ll. 6-10 of Campisano).

4. Claims 109-110, 114, 123 are rejected under 35 U.S.C. 102(b)/103(a) as being unpatentable over Rose et al. (US 5770843).

Claim 109 –

As per claim 109, Rose disclose *a* payment card system and that protects private data of a customer from theft and misuse from merchant computer systems in customer to merchant payment transactions having the limitations of:

- *a payment card with a substrate; (see at least col. 1, ll. 66-67 of Rose)*
- *a customer identifier that is without customer identity data, the customer identifier maps to the payment card system; (see at least col. 2, ll. 14-22)*
- *the customer identifier is encoded to be an encoded customer identifier when, the customer identifier is encoded with an algorithm in the payment card system and then embeds a reference code that references the algorithm; (see at least* col. 3, l. 26 through col. 4, l. 61 *of Rose)*
- *the substrate encoded with the encoded customer identifier (see at least* col. 3, l. 26 through col. 4, l. 61 *of Rose)*
- *the substrate printed with an alias name selected by the customer. (see at least col. 2, ll. 1-3, 24-27 of Rose)*

The Examiner notes that Rose does not specifically state “algorithm in the payment card system."

However, Rose does disclose:

> The card bears a machine readable code, which is transmitted to a database at a remote location. The database locates a record associated with the code, which contains one or more account numbers. (see Abstract)
>
> The code contained within the magnetic stripe is actually a set of signals. This set of signals when delivered to the card reader and hence to database management software cause the software to fetch the account

numbers and PINs which are associated with the code. (see col. 4, ll. 26-31)

Thus, the code acts as a key to unlock and release the account numbers and the PINs. In principle, the code is no different than a key which unlocks a strongbox which contains the database in a paper format. (see col. 4, ll. 32-36)

Further, the code should not be viewed as or confused with numbers or other alphanumeric characters. The code contained in the magnetic strip is a physical entity which includes physical actions when acted upon by a physical device such as a card reader. (see col. 4, ll. 37-41)

Representing the code as a string of numbers merely presents the code in human-understandable form, which is necessary for a human to read the code because a human cannot directly read the signals on the magnetic stripe. (see col. 4, ll. 42-44)

"Software" much exists in a form which is readable by a microprocessor, and readable at speeds at which the microprocessor operates. (see col. 4, ll. 56-58)

Even though Rose does not explicitly state "algorithm", Rose teaches a code contained in the magnetic stripe that is transmitted to the remote database management software, causing the software to fetch account numbers and PINs which are associated with the code. One of ordinary skill in the art would have been motivated to include the embedded code, remote database with associated software since the associated code and software fetch account numbers and PINs which are associated with that code embedded in the magnetic stripe of the card.

Claim 110 –

Rose teach the system of claim 109 as described above. Rose et al. further disclose *a system* having the limitations of:

- *the encoding medium is a magnetic strip. (see at least col. 2, ll. 10-14 of Rose et al.)*

Claim 114 –

As per claim 114, Rose disclose *a* method of conducting a payment transaction that protects the privacy of customer identity and bankcard data, from theft and misuse from merchant computer systems having the limitations of:

- *enabling creating a customer identifier that is without customer identity data, the customer identifier maps to a payment card system; (see at least* col. 3, l. 26 through col. 4, l. 61 *of Rose)*
- *encoding the customer identifier with an algorithm, and then embedding a reference code that references the algorithm in the payment card system, thus getting an encoded customer identifier; (see at least* col. 3, l. 26 through col. 4, l. 61 *of Rose)*
- *delivering to a customer, a payment card with a substrate printed with an alias name selected by the* customer and encoded with the encoded customer identifier. *(see at least col. 2, ll. 1-3, 24-27 of Rose et al.)*

The Examiner notes that Rose does not specifically state “algorithm in the payment card system."

However, Rose does disclose:

> The card bears a machine readable code, which is transmitted to a database at a remote location. The database locates a record associated with the code, which contains one or more account numbers. (see Abstract)

> The code contained within the magnetic stripe is actually a set of signals. This set of signals when delivered to the card reader and thence to database management software cause the software to fetch the account numbers and PINs which are associated with the code. (see col. 4, ll. 26-31)
>
> Thus, the code acts as a key to unlock and release the account numbers and the PINs. In principle, the code is no different than a key which unlocks a strongbox which contains the database in a paper format. (see col. 4, ll. 32-36)
>
> Further, the code should not be viewed as or confused with numbers or other alphanumeric characters. The code contained in the magnetic strip is a physical entity which includes physical actions when acted upon by a physical device such as a card reader. (see col. 4, ll. 37-41)
>
> Representing the code as a string of numbers merely presents the code in human-understandable form, which is necessary for a human to read the code because a human cannot directly read the signals on the magnetic stripe. (see col. 4, ll. 42-44)
>
> "Software" mush exist in a form which is readable by a microprocessor, and readable at speeds at which the microprocessor operates. (see col. 4, ll. 56-58)

Even though Rose does not explicitly state "algorithm", Rose teaches a code contained in the magnetic stripe that is transmitted to the remote database management software, causing the software to fetch account numbers and PINs which are associated with the code. One of ordinary skill in the art would have been motivated to include the

embedded code, remote database with associated software since the associated code and software fetch account numbers and PINs which are associated with that code embedded in the magnetic stripe of the card.

Claim 123 –

As per claim 123, Rose disclose *a payment security system that provides identity security in use of bankcards, from merchant computer systems,* having the limitations of:

- *a customer identifier that is without customer identity data; (see at least col. 2, ll. 14-16 of Rose et al.)*
- *the customer identifier maps to a plurality of bankcard data of the customer, each bankcard data identified with a card specific personal identification number (CPIN) in the payment security system; (see at least* col. 3, l. 26 through col. 4, l. 61 *of Rose)*
- *the customer identifier is encoded to be an encoded customer identifier when encoded with an algorithm from a list of such algorithms in a database maintained by the payment security system and then embeds a reference code that references the algorithm, the encoded customer identifier is then encoded on a payment card encoding mechanism, wherein the payment card and the CPIN is used by the customer at a merchant point of sale (POS) of a merchant system for conducting a payment transaction. (see at least* col. 3, l. 26 through col. 4, l. 61 *of Rose)*

The Examiner notes that Rose does not specifically state “algorithm in the payment card system."

However, Rose does disclose:

> The card bears a machine readable code, which is transmitted to a database at a remote location. The database locates a record associated

with the code, which contains one or more account numbers. (see Abstract)

The code contained within the magnetic stripe is actually a set of signals. This set of signals when delivered to the card reader and thence to database management software cause the software to fetch the account numbers and PINs which are associated with the code. (see col. 4, ll. 26-31)

Thus, the code acts as a key to unlock and release the account numbers and the PINs. In principle, the code is no different than a key which unlocks a strongbox which contains the database in a paper format. (see col. 4, ll. 32-36)

Further, the code should not be viewed as or confused with numbers or other alphanumeric characters. The code contained in the magnetic strip is a physical entity which includes physical actions when acted upon by a physical device such as a card reader. (see col. 4, ll. 37-41)

Representing the code as a string of numbers merely presents the code in human-understandable form, which is necessary for a human to read the code because a human cannot directly read the signals on the magnetic stripe. (see col. 4, ll. 42-44)

"Software" mush exist in a form which is readable by a microprocessor, and readable at speeds at which the microprocessor operates. (see col. 4, ll. 56-58)

Even though Rose does not explicitly state "algorithm", Rose teaches a code contained in the magnetic stripe that is transmitted to the remote database management software,

causing the software to fetch account numbers and PINs which are associated with the code. One of ordinary skill in the art would have been motivated to include the embedded code, remote database with associated software since the associated code and software fetch account numbers and PINs which are associated with that code embedded in the magnetic stripe of the card.

5. Claim 112, 115-116 is rejected under 35 U.S.C. 103(a) as being unpatentable over Rose et al. (US 5770843) in view of Campisano.

Claim 112 –

Rose teach the system of claim 109 as described above. Rose et al. further disclose *a system* having the limitations of:

- *the encoded customer identifier from the payment card used for a payment transaction at a merchant point of sale (POS), along with entry of a bankcard specific personal identification number (CPIN) by the customer; (see at least* col. 3, l. 26 through col. 4, l. 61 *of Rose)*
- *the payment card system decodes the encoded customer identifier using the algorithm referenced by the code present in the encoded customer identifier,. (see at least* col. 3, l. 26 through col. 4, l. 61 *of Rose)*

Rose does not explicitly disclose:

- *are routed from the POS to an adapted prior art merchant gateway, the adaptation in the prior art merchant gateway routes the encoded customer identifier and the CPIN to the payment card system*
- *the payment card system then maps the customer identifier and the CPIN to retrieve a specific bankcard data and returns the specific bankcard data to the adapted prior art merchant gateway*

Rose in view of Campisano teach *are routed from the POS to an adapted prior art merchant gateway, the adaptation in the prior art merchant gateway routes the encoded customer identifier and the CPIN to the payment card system; the payment card system then maps the customer identifier and the CPIN to retrieve a specific bankcard data and returns the specific bankcard data to the adapted prior art merchant gateway* (see at least col. 3, l. 26 through col. 4, l. 61 of Rose; *see at least Fig. 1, col. 2, ll. 31-37;* col. 2, l. 66 through col. 3, l. 10 of Campisano). It would have been obvious to one of ordinary skill in the art at the time of the invention to expand the method of Rose to include a verification process and subsequent charging of the credit card as taught by Campisano. One of ordinary skill in the art at the time of the invention would have been motivated to expand the method of Rose in this way since the verification process is similar to that used to verify original credit card numbers and expiration dates and once the number has been verified, the merchant processes the transaction and the credit card is charged, completing the transaction (see at least col. 2, l. 66 through col. 3, l. 10 of Campisano).

Claim 115 –

Rose teach the bankcard of claim 114 as described above. Rose et al. further disclose *a bankcard* having the limitations of:

- *enabling using the payment card for the payment transaction at a merchant point of sale (POS) and entering a bankcard specific personal identification number (CPIN) by the customer; (see at least* col. 3, l. 26 through col. 4, l. 61 *of Rose)*

Rose does not explicitly disclose:

- *enabling the POS routing a payment transaction record to an adapted prior art merchant gateway;*
- *enabling identifying the use of the payment card at the POS by the adapted prior art merchant gateway, and routing the encoded customer identifier and the CPIN of the payment transaction to the payment card system.*

Rose in view of Campisano teach *enabling the POS routing a payment transaction record to an adapted prior art merchant gateway; enabling identifying the use of the payment card at the POS by the adapted prior art merchant gateway, and routing the encoded customer identifier and the CPIN of the payment transaction to the payment card system* (see at least col. 3, l. 26 through col. 4, l. 61 of Rose; *see at least Fig. 1, col. 2, ll. 31-37;* col. 2, l. 66 through col. 3, l. 10 of Campisano). It would have been obvious to one of ordinary skill in the art at the time of the invention to expand the method of Rose to include a verification process and subsequent charging of the credit card as taught by Campisano. One of ordinary skill in the art at the time of the invention would have been motivated to expand the method of Rose in this way since the verification process is similar to that used to verify original credit card numbers and expiration dates and once the number has been verified, the merchant processes the transaction and the credit card is charged, completing the transaction (see at least col. 2, l. 66 through col. 3, l. 10 of Campisano).

Claim 116 –

Rose in view of Campisano teach the bankcard of claim 115 as described above. Rose et al. further disclose *a bankcard* having the limitations of:

- *decoding the encoded customer identifier by the payment card system using the algorithm that is referenced by the code in the encoded customer identifier, and using the customer identifier and the CPIN, retrieving specific bankcard data in the payment card system and returning to the adapted prior art merchant gateway. (see at least* col. 3, l. 26 through col. 4, l. 61 *of Rose)*

6. Claim 111 is rejected under 35 U.S.C. 103(a) as being unpatentable over Rose et al. (US 5770843) as applied to claim 109 above, further in view of Campisano.

Claim 111 –

Rose teach the bankcard of claim 109 as described above. Rose et al. does not explicitly disclose:

- *the customer-identifier is self-created by the customer.*

Campisano teach *the customer-identifier is self-created by the customer* (see at least col. 3, ll. 63-66). It would have been obvious to one of ordinary skill in the art at the time of the invention to expand the payment card system of Rose et al. to include a card member selecting a PIN as taught by Campisano. One of ordinary skill in the art at the time of the invention would have been motivated to expand the payment card system of Rose et al. in this way since allows a customer to select multiple PINs, each of which would correspond to a different credit card and provide the PIN corresponding to the card the customer wishes to charge the purchase on (see at least col. 4, ll. 6-10 of Campisano).

7. Claims 113 are rejected under 35 U.S.C. 103(a) as being unpatentable over Rose et al. (US 5770843) as applied to claims 109, 112 further in view of Campisano and Low et al.

Claim 113 –

Rose teach the system of claim 112 as described above. Rose does not explicitly disclose:

- *the adapted prior art merchant gateway, after receiving the specific bank card data from the payment system, assembles a payment transaction record using the specific bankcard data for submission of the payment transaction record to a bankcard authorization network,*
- *thereby the payment card system operating with the payment card system does not transfer customer identity data to the merchant computer systems.*

Rose in view of Campisano teach *the adapted prior art merchant gateway, after receiving the specific bank card data from the payment system, assembles a payment transaction record using the specific bankcard data for submission of the payment transaction record to a bankcard authorization network* (see at least col. 3, l. 26 through col. 4, l. 61 of Rose; *see at least Fig. 1, col. 2, ll. 31-37;* col. 2, l. 66 through col. 3, l. 10 of Campisano). It would have been obvious to one of ordinary skill in the art at the time of the invention to expand the method of Rose to include a verification process and subsequent charging of the credit card as taught by Campisano. One of ordinary skill in the art at the time of the invention would have been motivated to expand the method of Rose in this way since the verification process is similar to that used to verify original credit card numbers and expiration dates and once the number has been verified, the merchant processes the transaction and the credit card is charged, completing the transaction (see at least col. 2, l. 66 through col. 3, l. 10 of Campisano).

Low et al. teach *thereby the payment card system operating with the payment card system does not transfer customer identity data to the merchant computer systems* (see at least col. 3, ll. 9-11; 18-20, 21-29, 33-37). It would have been obvious to one of ordinary skill in the art at the time of the invention to expand the method of Rose to include bank Bp which knows the customer only by the pseudonym P and transfers funds from account Bp to the stores account Bs as taught by Low et al. One of ordinary skill in the art at the time of the invention would have been motivated to expand the method of Rose in this way since the protocols ensure the anonymity is maintained even if parties other than the purchaser collude with each other to obtain information about the customer (see at least col. 2, ll. 13-17 of Low et al.).

8. Claim 117 is rejected under 35 U.S.C. 103(a) as being unpatentable over Rose et al. (US 5770843) as applied to claims 114-116 above further in view of Low et al.

Claim 117 –

Rose in view of Campisano teach the bankcard of claim 116 as described above. Rose does not explicitly disclose:

- *enabling the adapted prior art merchant gateway, after receiving the specific bankcard data from the adapted prior art merchant gateway, to assemble a payment transaction record with the specific bankcard data for submitting the payment transaction record to a bankcard authorization network,*
- *wherein the payment card system does not transfer customer identity data to the merchant computer systems.*

Rose in view of Campisano teach *enabling the adapted prior art merchant gateway, after receiving the specific bankcard data from the adapted prior art merchant gateway, to assemble a payment transaction record with the specific bankcard data for submitting the payment transaction record to a bankcard authorization network* (see at least col. 3, l. 26 through col. 4, l. 61 of Rose; *see at least Fig. 1, col. 2, ll. 31-37;* col. 2, l. 66 through col. 3, l. 10 of Campisano). It would have been obvious to one of ordinary skill in the art at the time of the invention to expand the method of Rose to include a verification process and subsequent charging of the credit card as taught by Campisano. One of ordinary skill in the art at the time of the invention would have been motivated to expand the method of Rose in this way since the verification process is similar to that used to verify original credit card numbers and expiration dates and once the number has been verified, the merchant processes the transaction and the credit card is charged, completing the transaction (see at least col. 2, l. 66 through col. 3, l. 10 of Campisano).

Low et al. teach *wherein the payment card system does not transfer customer identity data to the merchant computer systems* (see at least col. 3, ll. 9-11; 18-20, 21-29, 33-37). It would have been obvious to one of ordinary skill in the art at the time of the invention to expand the method of Rose to include bank Bp which knows the customer only by the pseudonym P and transfers funds from account Bp to the stores account Bs as taught by Low et al. One of ordinary skill in the art at the time of the invention would have been motivated to expand the method of Rose in this way since the protocols ensure the anonymity is maintained even if parties other than the purchaser collude with each other to obtain information about the customer (see at least col. 2, ll. 13-17 of Low et al.).

9. Claims 118-120 are rejected under 35 U.S.C. 103(a) as being unpatentable over Rose et al. (US 5770843) as applied to claims 114 above further in view of Albert et al. (US 5870722) and Duyck (US 5557087).

Claim 118 –

Rose teach the bankcard of claim 114 as described above. Rose further disclose:

- *enabling using the payment card for the payment transaction at a merchant point of sale (POS) and enabling entering a bankcard specific personal identification number (CPIN) by the customer; (see at least* col. 3, l. 26 through col. 4, l. 61 *of Rose)*
- *connecting by the merchant POS to the payment card system for routing a payment transaction record that includes …, …, the encoded customer identifier, and the CPIN. (see at least* col. 3, ll. 46-53, col. 4, ll. 15-61 *of Rose)*

Rose does not explicitly disclose:

- *connecting wirelessly by the merchant POS to the payment card system payment transaction record that includes a payment amount,*
- *merchant identifier, reference number*

Albert et al. teach *connecting wirelessly by the merchant POS to the payment card system payment transaction record that includes a payment amount* (see at least col. 5, l. 37 through col. 6, l. 24, Fig. 3). It would have been obvious to one of ordinary skill in the art at the time of the invention to expand the method of Rose et al. to include wireless financial transactions as taught by Albert et al. One of ordinary skill in the art at the time of the invention would have been motivated to expand the method of Rose et al. in this way since it provides a method of settlement batch processing which may be used when a conventional financial transaction processing point-of-sale terminal is used with a wireless transmission system (see at least col. 10, ll. 8-12 of Albert et al.)

Duyck teach *the payment transaction data that includes a merchant identifier, reference number, a payment amount* (see at least Figs. 2-3 and col. 3, ll. 33-52; col. 4, l. 3 (34, ask for 1 or 2 reference #'s, see Fig. 2)). It would have been obvious to one of ordinary skill in the art at the time of the invention to expand the method of Rose to include payment amount, merchant ID, reference numbers as taught by Duyck. One of ordinary skill in the art at the time of the invention would have been motivated to expand the method of Rose in this way since it allows for merchants to share a device rather than use their own dedicated device (see at least Abstract) and since the unique merchant code links the transaction to a particular merchant (see at least col. 3, ll. 33-52 of Duyck).

Claim 119 –

Rose teach the bankcard of claim 118 as described above. Albert further disclose:

- *receiving wirelessly the payment transaction record by the payment card system.*

Albert et al. teach *receiving wirelessly the payment transaction record by the payment card system* (see at least col. 5, l. 37 through col. 6, l. 24, Fig. 3). It would have been obvious to one of ordinary skill in the art at the time of the invention to expand the method of Rose et al. in view of Campisano to include wireless financial transactions as taught by Albert et al. One of ordinary skill in the art at the time of the invention would have been motivated to expand the method of Rose et al. in view of Campisano in this way since it provides a method of settlement batch processing which may be used when a conventional financial transaction processing point-of-sale terminal is used with a wireless transmission system (see at least col. 10, ll. 8-12 of Albert et al.).

Claim 120 –

Rose in view of Albert et al. (US 5870722) and Duyck teach the bankcard of claim 119 as described above. Rose further disclose:

- *decoding the encoded customer identifier by the payment card system using the algorithm that is referenced by the code in the encoded customer identifier, and using the customer identifier and the CPIN, retrieving specific bankcard data in the payment card system. (see at least* col. 3, l. 26 through col. 4, l. 61 *of Rose)*

10. Claim 121 is rejected under 35 U.S.C. 103(a) as being unpatentable over Rose et al. (US 5770843) as applied to claims 114 above further in view of Albert et al. (US 5870722) and Duyck (US 5557087) as applied to claims 118-120 above, further in view of Campisano, and Gillin et al. (US 7254557).

Claim 121 –

Rose in view of Albert et al. (US 5870722) and Duyck teach the bankcard of claim 120 as described above. Rose does not explicitly disclose:

- *assembling a payment transaction record with the specific bankcard data, the payment transaction record includes a customer name, a bankcard number, an expiration date, the merchant identifier, the payment amount, and the reference number, and*

- *submitting the payment transaction record to a card authorization network via an adapted prior art merchant gateway.*

Rose in view of Campisano teach *submitting the payment transaction record to a card authorization network via an adapted prior art merchant gateway* (see at least col. 3, l. 26 through col. 4, l. 61 of Rose; *see at least Fig. 1, col. 2, ll. 31-37;* col. 2, l. 66 through col. 3, l. 10 of Campisano). It would have been obvious to one of ordinary skill in the art at the time of the invention to expand the method of Rose to include a verification process and subsequent charging of the credit card as taught by Campisano. One of ordinary skill in the art at the time of the invention would have been motivated to expand the method of Rose in this way since the verification process is similar to that used to verify original credit card numbers and expiration dates and once the number has been verified, the merchant processes the transaction and the credit card is charged, completing the transaction (see at least col. 2, l. 66 through col. 3, l. 10 of Campisano).

Duyck teach *the payment transaction data that includes a merchant identifier and payment amount, the reference number* (see at least Figs. 2-3 and col. 3, ll. 33-52; col. 4, l. 3 (34, ask for 1 or 2 reference #'s, see Fig. 2)). It would have been obvious to one of ordinary skill in the art at the time of the invention to expand the method of Rose in view of Campisano to include transaction amount and unique merchant code as taught by Duyck. One of ordinary skill in the art at the time of the invention would have been motivated to expand the method of Rose in view of Campisano in this way since the unique merchant code links the transaction to a particular merchant (see at least col. 3, ll. 33-52 of Duyck).

Gillin et al. teach *a customer name, a bankcard number, an expiration date* (see at least col. 14, ll. 15-18). It would have been obvious to one of ordinary skill in the art at the time of the invention to expand the method of Rose to include a database that correlates anonymous information for individual financial services cards with active individual accounts in one table and a second table that correlates identifying information for a given account such as actual name, payment information, like credit card number and expiration date as taught by Gillin et al. One of ordinary skill in the art at the time of the invention would have been motivated to expand the method of Rose in this way since allows for correlation of anonymous financial card information with actual financial card information (see at least col. 14, ll. 11-18 of Gillin et al.).

11. Claim 122 is rejected under 35 U.S.C. 103(a) as being unpatentable over Rose et al. (US 5770843) as applied to claims 114 above further in view of Albert et al. (US 5870722) and Duyck (US 5557087) as applied to claims 118-120 above, further in view of Campisano, and Gillin et al. (US 7254557) as applied to claim 121 above, further in view of Low et al.

Claim 122 –

Rose in view of Albert et al. (US 5870722) and Duyck, Campisano, and Gillin et al. teach the bankcard of claim 120 as described above. Rose does not explicitly disclose:

- *receiving a payment approval record by the payment card system from the card authorization network via the adapted prior art merchant gateway, the payment approval record, that includes the reference number, the payment amount and a payment authorization number, and*
- *forwarding wirelessly the payment approval record to the merchant POS,*
- *wherein the payment card system does not transfer customer identity and bankcard data to the merchant computer systems.*

Rose in view of Campisano teach *receiving a payment approval record by the payment card system from the card authorization network via the adapted prior art merchant gateway, the payment approval record includes the reference number, the payment amount and a payment authorization number* (see at least col. 3, l. 26 through col. 4, l. 61 of Rose; *see at least Fig. 1, col. 2, ll. 31-37;* col. 2, l. 66 through col. 3, l. 10 of Campisano). It would have been obvious to one of ordinary skill in the art at the time of the invention to expand the method of Rose to include a verification process and subsequent charging of the credit card as taught by Campisano. One of ordinary skill in the art at the time of the invention would have been motivated to expand the method of Rose in this way since the verification process is similar to that used to verify original credit card numbers and expiration dates and once the number has been verified, the merchant processes the transaction and the credit card is charged, completing the transaction (see at least col. 2, l. 66 through col. 3, l. 10 of Campisano).

Albert et al. teach *forwarding wirelessly the payment approval record to the merchant POS* (see at least col. 5, l. 37 through col. 6, l. 24, Fig. 3). It would have been obvious to one of ordinary skill in the art at the time of the invention to expand the method of Rose et al. in view of Campisano to include wireless financial transactions as taught by Albert et al. One of ordinary skill in the art at the time of the invention would have been motivated to expand the method of Rose et al. in view of Campisano in this way since it provides a method of settlement batch processing which may be used when a conventional financial transaction processing point-of-sale terminal is used with a wireless transmission system (see at least col. 10, ll. 8-12 of Albert et al.).

Low et al. teach *wherein the payment card system does not transfer customer identity and bankcard data to the merchant computer systems* (see at least col. 3, ll. 9-11; 18-20, 21-29, 33-37). It would have been obvious to one of ordinary skill in the art at the time of the invention to expand the method of Rose to include bank Bp which knows the customer only by the pseudonym P and transfers funds from account Bp to the stores account Bs as taught by Low et al. One of ordinary skill in the art at the time of the invention would have been motivated to expand the method of Rose in this way since the protocols ensure the anonymity is maintained even if parties other than the purchaser collude with each other to obtain information about the customer (see at least col. 2, ll. 13-17 of Low et al.).

12. Claim 124 is rejected under 35 U.S.C. 103(a) as being unpatentable over Rose et al. (US 5770843) as applied to claim 123 above, further in view of Campisano and Low et al.

Claim 124 –

Rose teach the payment security system of claim 123 as described above. Rose does not explicitly disclose:

- *on swiping of the payment card and entry of the CPIN, the payment security system receives from the merchant POS, the encoded customer identifier and the CPIN, decodes the encoded customer identifier using the customer identifier and the CPIN selects the specific bankcard data of the customer for processing the payment transaction with a bankcard processing network,*
- *wherein the security system does not transfer the customer and customer bankcard data to the merchant system.*

Rose in view of Campisano teach *on swiping of the payment card and entry of the CPIN, the payment security system receives from the merchant POS, the encoded customer identifier and the CPIN, decodes the encoded customer identifier using the customer identifier and the CPIN selects the specific bankcard data of the customer for processing the payment transaction with a bankcard processing network* (see at least col. 3, l. 26 through col. 4, l. 61 of Rose; *see at least Fig. 1, col. 2, ll. 31-37;* col. 2, l. 66 through col. 3, l. 10 of Campisano). It would have been obvious to one of ordinary skill in the art at the time of the invention to expand the method of Rose to include a verification process and subsequent charging of the credit card as taught by Campisano. One of ordinary skill in the art at the time of the invention would have been motivated to expand the method of Rose in this way since the verification process is similar to that used to verify original credit card numbers and expiration dates and once the number has been verified, the merchant processes the transaction and the credit card is charged, completing the transaction (see at least col. 2, l. 66 through col. 3, l. 10 of Campisano).

Low et al. teach *wherein the security system does not transfer the customer and customer bankcard data to the merchant system* (see at least col. 3, ll. 9-11; 18-20, 21-29, 33-37). It would have been obvious to one of ordinary skill in the art at the time of the invention to expand the method of Rose to include bank Bp which knows the customer only by the pseudonym P and transfers funds from account Bp to the stores account Bs as taught by Low et al. One of ordinary skill in the art at the time of the invention would have been motivated to expand the method of Rose in this way since the protocols ensure the anonymity is maintained even if parties other than the purchaser collude with each other to obtain information about the customer (see at least col. 2, ll. 13-17 of Low et al.).

(10) Response to Argument

Independent Claims 106, 109, 114 & 123:

Claim 106 –

At page 12 of the Appeal Brief, Appellant argues elements (b), (c), and (e) are neither taught nor even fairly suggested by Rose and Campisano. The Examiner respectfully disagrees for at least the following reasons:

The Examiner notes that col. 2, ll. 1-2 of Rose teach that the name of the card owner does not appear on the card, either in print or machine-readable format. The Examiner notes that Appellant recognizes that Rose teaches a payment card which has a code on the card and the code is associated with a bank account.

With regard to Appellants arguments with respect to (b), (c) and (e):

Rose disclose:

- (c) *interfacing by the adapted prior art gateway with a payment system, and sending to the payment card system the customer identifier and the CPIN; (see at least col. 2, ll. 1-3, 14-22, 24-27; col. 3, ll. 46-55, col. 4, ll. 16-40, of Rose)*

> **col. 2, ll. 1-2:** the *name of the card owner does not appear on the card, either in print or machine-readable format*.

col. 2, ll. 14-22: the *code does not directly correspond to any account number* of a credit account held by the owner. Thus, if the card is lost, a person finding the card obtains no information by which a fraudulent transaction can be undertaken. Therefore, based on the foregoing, *one form of the invention is* ***completely devoid of markings which identify either the card owner or a financial institution****, but does carry a machine readable code 6*.

col. 3, ll. 26-53: ordinarily, when a customer makes a credit card purchase at a retail establishment, *the establishment request confirmation of validity of the credit card from* ***the issuer of the credit card***. In doing so, the establishment is required to identify itself, by providing its "store number," whereupon the establishment is given a transaction number, which is used to identify the purchase.

col. 4, ll. 16-25: In one form of the invention, a conclusion is reached as to the identity of the customer. That is when the customer provides a PIN which matches that associated with an account number stored in the database, the customer is deemed to be an authentic owner of that account. The conclusion can be either expressly acknowledged, as by a cashier stating, "Mr. Wilcox, your identity has been verified," or tacitly acknowledged, by proceeding with the transaction, under the assumption that the customer is actually Mr. Wilcox.

col. 4, ll. 26-31: The ***code*** *contained within the magnetic stripe is actually* ***a set of signals***. This ***set of signals*** *when delivered to the card reader and hence to* ***database management software***

cause the software to ***fetch the account numbers and PINs*** which are associated with the code.

col. 4, ll. 32-36: Thus, the *code acts as a key to unlock and release the account numbers and the PINs*. In principle, the code is no different than a key which unlocks a strongbox which contains the database in a paper format.

col. 4, ll. 37-41: Further, the code should not be viewed as or confused with numbers or other alphanumeric characters. The code contained in the magnetic strip is a physical entity which includes physical actions when acted upon by a physical device such as a card reader.

Rose does not disclose:

- *(b) enabling sending the customer identifier and the CPIN to an adapted prior art merchant gateway, along with the payment transaction data that includes a merchant identifier and a payment amount;*
- *(e) returning to the adapted prior art merchant gateway the bankcard data corresponding to the customer identifier and the CPIN from the payment card system;*

Rose in view of Campisano teach (b) *enabling sending the customer identifier and the CPIN to an adapted prior art merchant gateway, along with the payment transaction data*; (e) *returning to the adapted prior art merchant gateway the bankcard data corresponding to the customer identifier and the CPIN from the payment card system*; (see at least col. 3, l. 26 through col. 4, l. 61 of Rose; *see at least Fig. 1, col. 2, ll. 31-37;* col. 2, l. 66 through col. 3, l. 10 of Campisano). It would have been obvious to one of ordinary skill in the art at the time of the invention to expand the method of Rose to include *a verification process and subsequent charging of the credit card* as taught by Campisano. One of ordinary skill in the art at the time of the invention would have been motivated to expand the method of Rose in this way since *the* ***verification*** *process is* ***similar to that used to verify original credit card numbers and expiration dates*** *and once the number has been verified, the merchant processes the transaction and the credit card is charged, completing the transaction* (see at least col. 2, l. 66 through col. 3, l. 10 of Campisano).

Moreover, with respect to Rose and Campisano the Examiner disagrees with Appellants assessment of the references alone and in combination. Both references teach a ***"plastic card" with an "alias"*** and ***PINs for different financial accounts associated with that alias***. As presented above, Rose teaches an alternative which include using the card at a merchant site with a cashier in which the customer swipes his/her card and enters a PIN. Rose also teaches that the magnetic strip is embedded with a code which does not directly correspond to any account number of a credit account held by the owner and that the codes acts to unlock and release account numbers and the PINs in the database management software. Appellants states that Campisano does not authorize a transaction. The Examiner respectfully disagree with the assessment, as pointed out above Campisano teaches (col. 2, l. 66 through col. 3, l. 10) -

> "***The verification process is similar to that used to verify original credit card numbers and expiration dates***. Once the number has been verified, the merchant processes the transaction and the credit card is charged in step 32. After the credit card has been charged, the transaction is complete."

and therefore teaches completing a transaction.

Appellant's arguments with regard to claim 106 is not persuasive for at least the above reasons.

Claim 109 –

At page 13 of the Appeal Brief, Appellant argues elements (b) and (c) are neither taught nor even fairly suggested by Rose and Campisano. Please note that Campisano was not utilized to reject claim 109. Moreover, the Examiner respectfully disagrees for at least the following reasons:

Rose disclose:

- *a customer identifier that is without customer identity data, the customer identifier maps to the payment card system; (see at least col. 2, ll. 14-22)*

> **col. 2, ll. 14-22:** the *code does not directly correspond to any account number* of a credit account held by the owner. Thus, if the card is lost, a person finding the card obtains no information by which a fraudulent transaction can be undertaken. Therefore, based on the foregoing, *one form of the invention is* ***completely devoid of markings which identify either the card owner or a financial institution****, but does carry a machine readable code 6*.

- *the customer identifier is encoded to be an encoded customer identifier when, the customer identifier is encoded with an algorithm in the payment card system and then embeds a reference code that references the algorithm; (see at least* col. 3, l. 26 through col. 4, l. 61 *of Rose)*

> **col. 3, ll. 26-53:** ordinarily, when a customer makes a credit card purchase at a retail establishment, *the establishment request confirmation of validity of the credit card from* ***the issuer of the credit card***. In doing so, the establishment is required to identify itself, by providing its "store number," whereupon the establishment is given a transaction number, which is used to identify the purchase.
>
> **col. 4, ll. 16-25:** In one form of the invention, a conclusion is reached as to the identity of the customer. That is when the customer provides a PIN which matches that associated with an account number stored in the database, the customer is deemed to be an authentic owner of that account. The conclusion can be either expressly acknowledged, as by a cashier stating, "Mr. Wilcox, your identity has been verified," or tacitly acknowledged, by proceeding with the transaction, under the assumption that the customer is actually Mr. Wilcox.
>
> **col. 4, ll. 26-31:** The ***code*** *contained within the magnetic stripe is actually* ***a set of signals***. This ***set of signals*** *when delivered to the card reader and hence to* ***database management software*** *cause the software to* ***fetch the account numbers and PINs*** which are associated with the code.

> **col. 4, ll. 32-36:** Thus, the *code acts as a key to unlock and release the account numbers and the PINs*. In principle, the code is no different than a key which unlocks a strongbox which contains the database in a paper format.
>
> **col. 4, ll. 37-41:** Further, the *code* should not be viewed as or confused with numbers or other alphanumeric characters. The *code contained in the magnetic strip* is a physical entity which includes physical actions when acted upon by a physical device such as a card reader.
>
> **col. 4, ll. 42-44:** Representing the *code as a string of numbers merely presents the code* in human-understandable form, which is necessary for a human to read the code because a human cannot directly *read the signals on the magnetic stripe*.
>
> **col. 4, ll. 56-58:** "***Software*" *must exist* *in a form which is readable by a microprocessor, and readable at speeds at which the microprocessor operates*.

As presented in the Final Office Action:

The Examiner notes that Rose does not specifically state "algorithm in the payment card system."

However, Rose does disclose:

> The card bears a machine readable code, which is transmitted to a database at a remote location. The database locates a record associated with the code, which contains one or more account numbers. (see Abstract)

> The code contained within the magnetic stripe is actually a set of signals. This set of signals when delivered to the card reader and hence to database management software cause the software to fetch the account numbers and PINs which are associated with the code. (see col. 4, ll. 26-31)
>
> Thus, the code acts as a key to unlock and release the account numbers and the PINs. In principle, the code is no different than a key which unlocks a strongbox which contains the database in a paper format. (see col. 4, ll. 32-36)
>
> Further, the code should not be viewed as or confused with numbers or other alphanumeric characters. The code contained in the magnetic strip is a physical entity which includes physical actions when acted upon by a physical device such as a card reader. (see col. 4, ll. 37-41)
>
> Representing the code as a string of numbers merely presents the code in human-understandable form, which is necessary for a human to read the code because a human cannot directly read the signals on the magnetic stripe. (see col. 4, ll. 42-44)
>
> "Software" much exists in a form which is readable by a microprocessor, and readable at speeds at which the microprocessor operates. (see col. 4, ll. 56-58)

Even though Rose does not explicitly state "algorithm", Rose teaches a code contained in the magnetic stripe that is transmitted to the remote database management software, causing the software to fetch account numbers and PINs which are associated with the code. One of ordinary skill in the art would have been motivated to include the embedded code, remote database with associated software since the associated code

and software fetch account numbers and PINs which are associated with that code embedded in the magnetic stripe of the card.

Appellant's arguments with regard to claim 109 is not persuasive for at least the above reasons.

Claim 114 –

At page 13 of the Appeal Brief, Appellant argues element (b) is neither taught nor even fairly suggested by Rose and Campisano. Please note that Campisano was not utilized to reject claim 114. Moreover, the Examiner respectfully disagrees for at least the following reasons:

Rose disclose:

- *encoding the customer identifier with an algorithm, and then embedding a reference code that references the algorithm in the payment card system, thus getting an encoded customer identifier; (see at least* col. 3, l. 26 through col. 4, l. 61 *of Rose)*

> **col. 3, ll. 26-53:** ordinarily, when a customer makes a credit card purchase at a retail establishment, *the establishment request confirmation of validity of the credit card from* ***the issuer of the credit card***. In doing so, the establishment is required to identify itself, by providing its "store number," whereupon the establishment is given a transaction number, which is used to identify the purchase.
>
> **col. 4, ll. 16-25:** In one form of the invention, a conclusion is reached as to the identity of the customer. That is when the

customer provides a PIN which matches that associated with an account number stored in the database, the customer is deemed to be an authentic owner of that account. The conclusion can be either expressly acknowledged, as by a cashier stating, "Mr. Wilcox, your identity has been verified," or tacitly acknowledged, by proceeding with the transaction, under the assumption that the customer is actually Mr. Wilcox.

col. 4, ll. 26-31: The ***code*** *contained within the magnetic stripe is actually* ***a set of signals***. This ***set of signals*** *when delivered to the card reader and hence to* ***database management software*** *cause the software to* ***fetch the account numbers and PINs*** which are associated with the code.

col. 4, ll. 32-36: Thus, the *code acts as a key to unlock and release the account numbers and the PINs*. In principle, the code is no different than a key which unlocks a strongbox which contains the database in a paper format.

col. 4, ll. 37-41: Further, the *code* should not be viewed as or confused with numbers or other alphanumeric characters. The *code contained in the magnetic strip* is a physical entity which includes physical actions when acted upon by a physical device such as a card reader.

col. 4, ll. 42-44: Representing the *code as a string of numbers merely presents the code* in human-understandable form, which is necessary for a human to read the code because a human cannot directly *read the signals on the magnetic stripe*.

> **col. 4, ll. 56-58:** "***Software*" *must exist* *in a form which is readable by a microprocessor, and readable at speeds at which the microprocessor operates***.

As presented in the Final Office Action:

The Examiner notes that Rose does not specifically state "algorithm in the payment card system."

However, Rose does disclose:

> The card bears a machine readable code, which is transmitted to a database at a remote location. The database locates a record associated with the code, which contains one or more account numbers. (see Abstract)
>
> The code contained within the magnetic stripe is actually a set of signals. This set of signals when delivered to the card reader and hence to database management software cause the software to fetch the account numbers and PINs which are associated with the code. (see col. 4, ll. 26-31)
>
> Thus, the code acts as a key to unlock and release the account numbers and the PINs. In principle, the code is no different than a key which unlocks a strongbox which contains the database in a paper format. (see col. 4, ll. 32-36)
>
> Further, the code should not be viewed as or confused with numbers or other alphanumeric characters. The code contained in the magnetic strip is a physical entity which includes physical actions when acted upon by a physical device such as a card reader. (see col. 4, ll. 37-41)

> Representing the code as a string of numbers merely presents the code in human-understandable form, which is necessary for a human to read the code because a human cannot directly read the signals on the magnetic stripe. (see col. 4, ll. 42-44)
>
> "Software" much exists in a form which is readable by a microprocessor, and readable at speeds at which the microprocessor operates. (see col. 4, ll. 56-58)

Even though Rose does not explicitly state "algorithm", Rose teaches a code contained in the magnetic stripe that is transmitted to the remote database management software, causing the software to fetch account numbers and PINs which are associated with the code. One of ordinary skill in the art would have been motivated to include the embedded code, remote database with associated software since the associated code and software fetch account numbers and PINs which are associated with that code embedded in the magnetic stripe of the card.

Appellant's arguments with regard to claim 114 is not persuasive for at least the above reasons.

Claim 123 –

At page 13 of the Appeal Brief, Appellant argues element (c) is neither taught nor even fairly suggested by Rose and Campisano. Please note that Campisano was not utilized to reject claim 123. Moreover, the Examiner respectfully disagrees for at least the following reasons:

Rose disclose:

- *the customer identifier is encoded to be an encoded customer identifier when encoded with an algorithm from a list of such algorithms in a database maintained by the payment security system and then embeds a reference code that references the algorithm, the encoded customer identifier is then encoded on a payment card encoding mechanism, wherein the payment card and the CPIN is used by the customer at a merchant point of sale (POS) of a merchant system for conducting a payment transaction. (see at least* col. 3, l. 26 through col. 4, l. 61 *of Rose)*

  col. 3, ll. 26-53: ordinarily, when a customer makes a credit card purchase at a retail establishment, *the establishment request confirmation of validity of the credit card from* ***the issuer of the credit card***. In doing so, the establishment is required to identify itself, by providing its "store number," whereupon the establishment is given a transaction number, which is used to identify the purchase.

  col. 4, ll. 16-25: In one form of the invention, a conclusion is reached as to the identity of the customer. That is when the customer provides a PIN which matches that associated with

an account number stored in the database, the customer is deemed to be an authentic owner of that account. The conclusion can be either expressly acknowledged, as by a cashier stating, "Mr. Wilcox, your identity has been verified," or tacitly acknowledged, by proceeding with the transaction, under the assumption that the customer is actually Mr. Wilcox.

col. 4, ll. 26-31: The ***code*** *contained within the magnetic stripe is actually* ***a set of signals***. This ***set of signals*** *when delivered to the card reader and hence to* ***database management software*** *cause the software to* ***fetch the account numbers and PINs*** which are associated with the code.

col. 4, ll. 32-36: Thus, the *code acts as a key to unlock and release the account numbers and the PINs*. In principle, the code is no different than a key which unlocks a strongbox which contains the database in a paper format.

col. 4, ll. 37-41: Further, the *code* should not be viewed as or confused with numbers or other alphanumeric characters. The *code contained in the magnetic strip* is a physical entity which includes physical actions when acted upon by a physical device such as a card reader.

col. 4, ll. 42-44: Representing the *code as a string of numbers merely presents the code* in human-understandable form, which is necessary for a human to read the code because a human cannot directly *read the signals on the magnetic stripe*.

> **col. 4, ll. 56-58:** "***Software*" *must exist* *in a form which is readable by a microprocessor, and readable at speeds at which the microprocessor operates*.

The Examiner notes that Rose does not specifically state "algorithm in the payment card system."

However, Rose does disclose:

> The card bears a machine readable code, which is transmitted to a database at a remote location. The database locates a record associated with the code, which contains one or more account numbers. (see Abstract)
>
> The code contained within the magnetic stripe is actually a set of signals. This set of signals when delivered to the card reader and thence to database management software cause the software to fetch the account numbers and PINs which are associated with the code. (see col. 4, ll. 26-31)
>
> Thus, the code acts as a key to unlock and release the account numbers and the PINs. In principle, the code is no different than a key which unlocks a strongbox which contains the database in a paper format. (see col. 4, ll. 32-36)
>
> Further, the code should not be viewed as or confused with numbers or other alphanumeric characters. The code contained in the magnetic strip is a physical entity which includes physical actions when acted upon by a physical device such as a card reader. (see col. 4, ll. 37-41)
>
> Representing the code as a string of numbers merely presents the code in human-understandable form, which is necessary for a human to read the

> code because a human cannot directly read the signals on the magnetic stripe. (see col. 4, ll. 42-44)
>
> "Software" mush exist in a form which is readable by a microprocessor, and readable at speeds at which the microprocessor operates. (see col. 4, ll. 56-58)

Even though Rose does not explicitly state "algorithm", Rose teaches a code contained in the magnetic stripe that is transmitted to the remote database management software, causing the software to fetch account numbers and PINs which are associated with the code. One of ordinary skill in the art would have been motivated to include the embedded code, remote database with associated software since the associated code and software fetch account numbers and PINs which are associated with that code embedded in the magnetic stripe of the card.

Appellant's arguments with regard to claim 123 is not persuasive for at least the above reasons.

Dependent Claims 107-108, 110-113, 115-122, 124:

Appellants arguments with respect to dependent claims is also not persuasive for at least the reasons set forth above for independent claims 106, 109, 114, and 123.

(11) Related Proceeding(s) Appendix

No decision rendered by a court or the Board is identified by the examiner in the Related Appeals and Interferences section of this examiner's answer.

For the above reasons, it is believed that the rejections should be sustained.

Respectfully submitted,

/Sarah M Monfeldt/

Examiner, Art Unit 3684

Conferees:

Kambiz Abdi /K. A./

Supervisory Patent Examiner, Art Unit 3684

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